

A VERBAL AND
VISUAL FORUM
FOR MINDS
IN THE SCHOOL OF
ARCHITECTURE

DIRECTORY:

ARCHITECTURAL ARTEFACT REDEFINED
THE PROBLEM OF THE ANGELS
DRAWING AT MIT
REVIEWS:
M ARCH, THESIS
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THE REFRESH

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VOLUME 1: MARCH 30

Architectural Artefact Redefined: The Significance of Architectural Drawing as Part of the Cultural Heritage

By Aysen Savas

The International Working party for the Documentation and Conservation of buildings, sites, and neighborhoods of the Modern Movement, DO CO MO MO, was initiated in 1988 by the University of Technology in Eindhoven, the Netherlands. Its purpose was, first, to further a research project aimed at preserving modern buildings and, second, to create a platform for discussion among experts. To this date, sixteen countries have joined: Austria, Belgium, Brazil, the BRD, Czechoslovakia, the DDR, England, France, Finland, Hungary, Italy, Sweden, Spain, Switzerland, the Soviet Union, and the Netherlands.

Neither the first conference of this organization, nor subsequent publications, have generated a tremendous impact on architectural discourse, particularly on this side of the Atlantic. However, the rather unexpected attempt to preserve selected examples of modern architecture from the 1920's and the 1930's did initiate a series of interesting questions.

Wessel Rinkel, from University of Utrecht, summarized the complexity of this issue in a paper entitled, "Controversy between functionalism and restoration: keep 'Zonestraat' for eternity as a ruin." By identifying certain buildings and suggesting their preservation, he says, DO CO MO MO declared a beginning and an end to the Modern Movement. The first question that should be raised by this assumption is: How is the reasoning behind the protection of modern buildings from deterioration different from the protection of historical cities which have been discussed extensively since the end of the Second World War? If the Modern Movement has already become part of architectural history, does this new organization really the continuation of preservationist tendencies in architecture?

Specialized institutions devoted to architecture, such as the archives of modern architecture, architectural galleries, research centers, libraries, and, finally, museums—established after the 1950's—present purposeful similarities with the DO CO MO MO. Most of the architectural museums, like the Franklinton Museum of Architecture and the Canadian Center for Architecture in Montreal, rehabilitate historic buildings to house their collections. But more importantly, these specialized institutions have not only preserved the actual material product of architecture—the building, they have also intensified the collection and preservation of architectural artefacts, such as drawings, models, sketchbooks and related written sources. Assimilating the artefacts with the buildings, these institutions have introduced a new procedure for the apprehension of 'objects' of architecture. Conventionally, the objects of architecture have been identified by their material product, the 'immobile' edifices. Thus, in the past, architects and writers have considered these edifices as the main tool of their educational, historical, and critical investigations. However, since architectural museums and specialized archives have emerged as a permanency, a location, and as an institution, they have redefined the 'meaning' of both architectural 'objects' and artefacts. Instead of

representing the objects they depict—whether architectural artefacts, drawings, models, or sketches—they have become the new objects for investigation. Furthermore, the mobilization of the artefact through exhibitions and publications has broadened dissemination of the architectural 'image' within the overall culture and within the discipline itself.

Institutions, such as the architectural museum, have redefined the disciplinary, cultural, and legal status of architectural objects. Architectural drawings, models, and written sources have come to be considered not solely as analytical tools and informative documents, but also as works of art themselves. A drawing, signed by an architect, becomes an object in a museum instead of a representation of a legal responsibility. This process of redefinition raises questions about the changing status of these 'documents.' Architects' artefactual production which used to be a private and/or professional activity, becomes significant both historically and culturally.

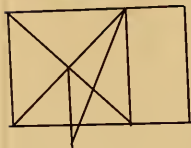
Architectural artefacts continually change their locations within and between private collections, galleries, archives and museums. Therefore, the perpetual dislocation of the artefacts necessitates the constitution of broader research into the various definitions of a 'modern architectural object.' The emergence of specialized institutions is significant because it can be perceived as the result of a rewinning interest in visual representation in the discipline. Or, it can also indicate changes at the level of architectural culture in general. ■

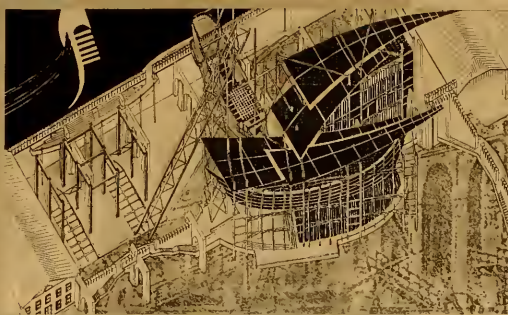
For further reading on architectural drawings as works of art and on the meaning of signature in architecture and the relation between architect and work see Jill Lever and Margaret Richardson, *The Architect as Artist*, New York, 1984 and Francesco Dal Co, "In Consideration of Time" in *Angelo*, Volume 1, ed. by Cynthia C. Davidson, New York, Pizzoli, 1981. Also see *Art After Modernism: Rethinking Representation*, New York, 1984.

The Problem of the Angels*

By Hashim Sarkis, Lecturer, Department of Architecture

Halfway through *Distant Relations*, the author, Carlos Fuentes, confesses that the story he is recounting is different from the one being told to him. The difference is not a function of inebriation or accuracy but that between two narratives: "There is a second, a contiguous, invisible parallel narration to every work we think unique." Fuentes turns this problem into a new possibility in representation. The story is about doubles, descendants, fathers and sons, namesakes who look for each other across cultures and continents and haunt and threaten each other's singularity. In writing a specific description of a fictitious character, the author chooses one representation against many others. These others do not disappear. They maintain in representations parallel to the one being selected. Every representation conceals, but at the same time asserts its other possibilities, the representations that it might be. The plurality that Fuentes uncovers is a general property of all acts of representation.





When I start a drawing I have no clear idea of what is the final product is going to look like, so it is an exploration process. The drawings depict a homogeneous world which is the collage of many smaller heterogeneous worlds, unfortunately devoid of simplicity. As far as drawing technique is concerned, three dimensionality created by strong shadows and dark backgrounds put an emphasis on individual building components and how these discrete components come together to form a particular atmosphere. Also, there is use of symbolic details reminiscent of the content, either as architectural elements or just as a sign ornamenting the drawing.

Murali German
M Arch Thesis 'The Arsenal of Venice: A Study on the Degree of Context-Conscious Architecture'

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This property can be used to further articulate a 'constructionist' view of representation, according to Nelson Goodman, who proposed this view, "the way the world is" is not predetermined. It is not possible, not even useful, to separate what is given (out there) from what is represented (mental). To speak of the world means to speak of one of its representations. If two representations are incompatible, they would be representing incompatible worlds, a pluralism. Reality is a product, not precondition, of representation. Truth, or "rightness of rendering", can only be determined within a particular representation. Only those freed from the fate of death and disappearance can locate themselves outside and describe 'the world' as it is. Representation neither defines nor displaces them because they are omnipresent. "Only the angel," says Massimo

Cacciari in the article *The Problem of Representation*. "Not mortals

2 Architecture, at many levels, bespeaks representation. Representation in architecture is a term that describes both the act and the product of this act. Drawings and models are usually referred to as representations of architecture, objects which depict buildings through conventional notational systems, practically at a smaller scale. These objects are usually not the final product of

architecture but the materialization of its ideas in other media. Representation in architecture refers to the employment of certain communication systems to express meaning: figuration, indexing, camouflage, etc. Architecture as representation is used when the subject matter of architecture refers to an originary moment in a (projected) reality, whether in nature (Abbe Laugier), in the act of building (Francesco Milizia), in a social act (Gottfried Semper), or in a mimetic ritual (Rene Girard).

The constructionist position allows an extension of the means of producing and representing architecture into means of perceiving it. The built environment that architecture helps shape is bound between the act of representing architecture and of experiencing architecture as representation. Drawings and models not only facilitate the making of architecture and represent the object of architecture, but they also help shape the habits of architectural experience. If there is a plurality of habits of reception, this does not indicate a conflict between the accuracy of representation and the distractions in reception. The plurality, as Fuentes observes, is already manifest in the act of representation: in the contiguous and parallel representations. Adopting, and expanding, this constructionist stance can perhaps help inspire a pluralist ethic of habitation. ■

* To John Wileyman

"For further readings on Nelson Goodman's position, see his *Ways of Worldmaking*. Hackett Publishing Company, Indianapolis, 1978 and 'The Way the World Is' in Nelson Goodman, *Problems and Projects*, Hackett Publishing Company, Indianapolis, 1972. See also John Dewey, *Art as Experience*, Wadsworth/Pengwyn Books, New York, 1934.

Welcome to Thresholds!

Thanks to the concerted work of editors Leah J. McGovern and Aiona Nitzan-Shiffan and the design of Neil Hargan, we launch what should be an engaging and lively forum for the voices of the Course for Architecture at MIT.

With collaboration of the students and faculty of the Department of Architecture and others at MIT, *Thresholds* can achieve an excellence that will make it a worthy representative of our school. Yet it is, above all, by and for our own community; its role is to recognize our activities and then to extend and intensify the discussion of our concerns. Please be responsive to the requests of the editors and, still more, seize the initiative to propose topics and to submit articles and designs. Make *Thresholds* vital to our program!

Stanford Anderson, Head, Department of Architecture

EDITORIAL

Thresholds is a renewal of the *Links* newsletter, which was previously published on a weekly basis, primarily for the design students. This new, more substantial and less frequent publication, incorporates all groups within the department in order to strengthen communication among students and faculty, and to foster more dialogue between students and the larger architectural community. We also hope to present an image of the school of Architecture as a compounded whole, with strengths from within the theoretical, design, and research departments. The uniqueness of *Thresholds* will be its ability to generate art and architectural discourse from within the school, due to the multiple seams between its diverse components. Regarding these seams as joints, rather than as dividing lines, will enrich this exchange.

By pursuing a theme for each issue, we will highlight alternately the different interests of the various groups within the school. This first issue on "representation" relates to the mini-series on "Section" within the spring lecture program, to which two reviews by Jeffrey Holmes on Robin Evans and by Samuel Ikenstadt on Henri Milon are dedicated. Expanding the meaning of representation is discussed in two essays by Aysehan Savas and Hashim Sarkis. The first essay examines the role of specialized institutions in changing the meaning of the architectural object, while the second essay demonstrates how, through expanding the meaning of architectural representation, one can arrive at a pluralist ethic of habitation. The drawing, as an exploratory or explanatory medium, is at the core of Chris Evans' studio-oriented discussion and interview with design faculty.

"MIT and the City," stemming from the faculty exhibition at the MIT Museum, is the topic of our next issue. We expect the preview critique in the present issue to solicit an extensive discussion, although not necessarily along the same lines. In addition, the question of public and private spaces will be engaged, hopefully both from within and from outside the discipline of architecture. We will also explore worldwide projects in which MIT students and faculty are involved in urban interventions.

The third issue will present the long-term "Third World" interest of MIT in light of the Post-Structuralist/Orientalist theories and the larger East-West discourse they generate. This will also be an opportunity to inquire into the Design for Islamic Societies program.

We thank our contributors for their thoughtful work. We invite further contributions within the framework of the themes. Any other material including sketches, design projects, articles, reviews or up-to-date listings of architectural events is welcomed. We are looking forward to future collaboration.

The Editors





David Gosten
M Arch Thesis "Interpreting
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Rail Campus Crossing in Seattle"

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Media or Means: A Discussion of the State of Drawing in the Studios of MIT, including interviews with faculty members Shayne O'Neil, Fernando Domeyko, and Maurice Smith By J. Chris Evans

Fernando Domeyko tells a little story about the Greek gods Kronos and Ios Kronos, he says, is the god of time, abstraction, rationalism, thinking. Ios is the god of the instant, action, process, the present, doing. The academic world, Domeyko believes, has become too involved with teaching through abstraction, and believes that architectural academia must go the way of Ios to recover its touch with reality. Although MIT has a national reputation as the academic bastion of process-oriented design, even after a relatively brief experience in the Department it is not difficult to find oneself questioning the Design Program's aura of "process," at least in terms of drawing. It seems unfortunate that a school which places such emphasis on process—methods of manifesting design in order to inevitably improve the final product in the real world—chooses not to teach drawing as a part of its curriculum, especially when the faculty acknowledges that skills are substandard and "getting weaker all the time" (Maurice Smith). All three faculty members I spoke with agreed that more could be done in teaching the relationship between drawing and design. Given that many Master's students do come into the Department without adequate skills, what is it that prevents MIT from teaching drawing? As Maurice Smith acknowledges, some apprehension arises out of the potential surface emphasis and the problems of postmodernism. MIT's staunch anti-Postmodernist stance only reinforces fears of drawing instruction leading to an emphasis on visually-oriented, surface architecture. At first this seems to be a reasonable concern, but it suggests that we do not have faith in what we teach. Others seem to feel that adding a drawing course would only take time away from the design studios, which assumes that you cannot learn about design in the process of learning to draw, and that we use our time as efficiently with or without the necessary tools for implementation. Finally, traditional conceptions of architectural education do not conceive of drawing instruction separate from a product-oriented or presentation-oriented instruction and usually take the form of art or drafting.

Shayne O'Neil advocates conceiving of drawing in the context of all representational media, and investigating all such media for their inherent qualities in relation to the architectural object. Basic knowledge of representation is a part of the basic skills. Drawing, like other representational media, is an abstraction through which we can record information about our world, but we need to be aware of its uses, implications and limitations. We need a "critical awareness" of the techniques. "For example, what are the projected consequences that a model might have in opposition to drawing?" O'Neil notes that a drawing, by virtue of its 2-dimensionality, will tend to avoid early commitment in the choices of materiality, whereas a model will be more likely to do so. Smith, in a similar vein, notes that the latter design gets from continuous surfaces, the more difficult it is for drawing to accomplish its task. Likewise, each type of drawing—plan, section, axonometric, perspective, etc.—has its own qualities and implications. O'Neil argues that there is not enough sectional investigation independent of plan and space-planning constraints, and that its dependency hinders sectional development. He also suggests that the choices students make of representational media can reveal a personal attitude towards a project, or towards design in general.

Domeyko teaches an understanding of drawing that goes beyond the knowledge of the different representational media. He advocates that students be encouraged to explore and discover their own agenda and perspective on the world through

drawing. "I don't draw, I explore." Every drawing should be part of the excavation of reality, an attempt to reveal qualities of physicality, space and light. We therefore must begin with the "real" in order to design from real experience. Smith also advocates exploratory observational drawing, and believes that students should draw those environments that are worthy of study to reveal their architectural qualities. While both agree that students should learn through drawing, for Smith observation is pre-supposed by the objective character of the world, whereas Domeyko's discovery is on a personal level, exploring and revealing one's own agenda in relation to the built object. Inagination, Domeyko says, must grow through experience. Thus, he conceives his undergraduate 4.04 class as a laboratory for training students to be sensitive and understanding of their environment. For Domeyko, this concern for experience and reality partially stems from the over-emphasis on vision and two-dimensional representation in modernity.

Arising out of the prevailing belief at MIT that the process of design never actually comes to conclusion, drawings considered as a product, or as Smith describes them, "surrogate buildings," have become directly associated or synonymous with presentation drawings, where the emphasis is on technique and beauty. MIT has had a tendency to ignore product because of its perceived relation to presentation, yet there is a wide gulf that separates these two. O'Neil argues that there is an integral relationship between process and product, and Domeyko does not acknowledge any distinction—both believe that the product is a part of the design process. Domeyko and O'Neil's, however, acknowledge a certain confusion in the studios about the necessity of commitment and accountability in the exploration of issues. Product is part of the design process because it encourages commitment to ideas, which only arise out of the consideration of a range of possibilities. There is, according to O'Neil, a certain precision and rigor that emerges from the product; it tends to be more explanatory than exploratory, but only through the process of decision-making. It is not representation for presentation, but representation of content. Design is more than just being able to put down ideas, and includes putting ideas in a place to be scrutinized and criticized; process includes dialogue. On the other hand, dialogue has often been allowed to substitute for personal student development. Process without accountability leads to the continual denial of information, and discussion in reviews more often arises out of what has not been explored than what has been. "If you don't have to decide," says Domeyko, "you don't know." Product-oriented drawing is part of the exploratory process by: 1) avoiding the denial of information; and 2) forcing commitment and thus forcing another level of thinking in the decision-making process—a part of the process that is a part of the real world. Those who would oppose one to the other—process to product—would limit the range of design thinking.

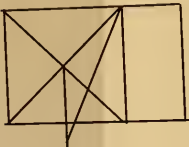
But, alas, MIT provides students with a convenient outlet from this dilemma of commitment, known as tracing paper, buff, burnard, etc. I believe the status of drawing at MIT has evolved into a product-oriented drawing under the guise of process drawing, or what I will call—borrowing a term from William Kirby Lockard—design drawing. Trace, as an exploratory and therefore non-committal medium, in conjunction with MIT's devaluation of the product, masks the continual denial of information. The result is often vague and ambiguous architecture. Those students without significant drawing experience, and thus without a developed confidence, automatically appropriate drafted, objective methods to structure their process. These students are unable to escape the limitations of the drafted medium, and thus are not presented the opportunity to

explore reality through their own agenda. Thus, drawing methods that tend to be exploratory by nature are used in the exploratory process, and produced on an exploratory medium. There is an assumption that trace as a medium means "in-process," but trace has devolved into a symbol of process. Trace has become a medium of expression, not a means to an end.

In opposition to typical conceptions of drawing instruction, I would like to propose an alternative method of teaching drawing as an integral part of the MIT design program, similar to, but expanded beyond Domeyko's 4.04 undergraduate class. Not unlike Smith's conception of a drawing method that parallels the design method, we need to develop and teach a drawing process akin to a thinking process: "as the visual or graphic component of reason" (Lockard, William Kirby, *Design Drawing*, p. 7-8). By considering drawing as a means to design rather than as a medium of expression, our instructional focus shifts—as does our whole attitude towards drawing.

"As DESIGN DRAWING, drawing must be deliberately tentative and exploratory, (and) more change. Design drawings should be made in a cognitively determined order, loosening the communication to the designer himself (and only secondarily to others), essentially accurate but only ritually structured—moving any new graphic means. Drawing used correctly in the design process is an exhaustively exploratory means toward a real product. The drawings have no real value in themselves, only in their relationship to the design decision-making process. The most valuable kinds of design drawings are those which suggest more drawings—which extend and shape the design process" (Lockard, p. 10). Lockard, an MIT graduate, argues that design drawing must substantially consist of freehand drawing, because its fluid and subtle characteristics may imply certain understandings that the strict and absolute character of drafting does not. He also emphasizes the overlay process, which encourages the addition of layers of information, as opposed to drafting which often wastes precious time trying to remove information via the electric eraser. Design drawing also includes principles and methods of perspective, which do not depend on orthographic drawings. The educated freehand is thus also more efficient. In the exploratory process, representations must be presented to the designer at a pace which can keep up with his evaluation and reconception processes. Speed in drawing, in my experience, comes after accuracy and, rather than heretic hand speed, is more a matter of confidence and wisdom" (Lockard, p. 122). Efficiency, O'Neil would argue, is one of drawing's inherent qualities. It is my contention that the students' lack of confidence in exploratory media is a significant cause of the seemingly ungracious approach to design currently prevailing in the design studios.

All three faculty members agree that skills and ideas must be taught concurrently to be productive. But as Domeyko notes, there are limitations to what any design studio can accomplish during the course of a semester. Certain foundations must be laid for students early on in the program so that they may bring their own exploratory agenda to the design studios. Thus, such a course might include instruction through observational and exploratory drawings, discussion regarding the qualities, implications and limitations of different representational forms, and most importantly, the basic skills and ideas of design drawing. One thing is clear to myself and the faculty members I spoke with: the weaknesses in students' drawing skills and understanding are inhibiting design. Just as significant, MIT has provided students with a way of circumventing this problem, making it even harder to detect. We can only conceive and produce that which we can represent—and if the tools for representation are limited, so too will be the limitations of what is produced. As critics, we need to be willing to hold students as accountable for what they don't put down on paper as we do for what they do put down, encouraging students to see beyond such limitations. And as students, we need to be our own worst critics. ■



Why Make Models?: In Response to Henry Milon's "Section: Architectural Models of the 16th-18th Centuries"

By Samuel Ikenstadt

Why make models? Why substitute what can be well and richly imagined with an approximation that is crude by comparison? Compared with drawings, models are expensive and slow. They require the collection of a variety of model materials and fastening strategies which have only tenuous relations with the building materials they designate. They also introduce gravity, a constant foreign to the process of drawing and, in fact, poorly explored with the materials and methods of architectural model making.

Despite this, building models have been a mainstay of architectural practice for millennia. Henry Milon, founding dean of the Center for Advanced Studies in the Visual Arts in Washington, D.C. and Visiting Professor at MIT, covered three centuries of this history in his talk on the evening of March 17. In addition to models, he discussed a variety of other representations of architecture. His historical investigations grappled with and relied upon building models in order to arrive at an understanding of objects no longer extant.

In a similar fashion, the architect, in the 16th, 17th and 18th centuries at least, had to circulate his imagination through a variety of representations in order to understand an object that had not yet come to be. In fact, Albert, the 15th century architectural theorist, had explicitly advocated the use of models along with drawings. "I always recommend the ancient builders practice by which not only drawings and pictures but also wooden models are made, so that the projected work can be considered and reconsidered, with the counsel of experts, in its whole and in all its parts." It is the model's capacity to be considered from multiple viewpoints—physically as one moves around it or, in the case of the giant, late 15th century model at Pienza through it and socially, as the design project is now viewable by such a "counsel of experts"—that recommended its continued employment by architects, despite the additional demands on time and resources.

The sectional model, in particular, exceeds the capacity of drawings in several significant directions. As Milon pointed out, the section through Michelangelo's well-known drum and dome model begun in 1558 was taken at the drum windows and thus allowed careful investigation of the relations between interior and exterior systems of ornament. Balthasar Neumann's model for the church of Vierzehnheiligen is split longitudinally. This privileges not only the processional movement along the church's main axis but also demonstrates the essential unity underlying Neumann's unconventional experiments with space. [It says little, however, about what must have been significant structural issues.] In the case of additions or alterations, where the actual presence of an existing building seems to resist an adequate mapping onto two-dimensional drawing, Milon noted again an interest in sectional models such as that built in the early 16th century for the cathedral at Como.

The model externalizes the imagination in a form that is fixed. It materializes what had previously been conjecture. Realizing this, Brunelleschi, according to his biographer, jealously guarded his architectural innovations by allowing errors in his models, which he would correct in the execution. On the other hand, the clarity and stability of form was precisely what Michelangelo counted on to free him, once he had completed the model, from the need for supervising the construction of St. Peter's dome. Once fixed in such a way of course, a design is liable to criticism. Michelangelo's model of the drum and dome was itself "corrected" some time after his death. In addition, the model, precisely inasmuch as it represents something but, can also represent legal ownership of a building, or of a city. As was the case with many of Milon's examples, the model was commissioned in order to confirm and display the possession of actual power and authority.

However, fidelity is not the only quality of models. A complementary theme of Milon's presentation was to inculcate role for models of all types played in the process of design, implementation, understanding and eventual alteration of architecture. At some level of thought and at several points in time, architects recognized the contribution of models to the conceptualization of architecture. The process of making models offers another means of engagement with form beyond contemplation, providing an opportunity to employ kinesthetic sensibilities beyond the reach of the purely visual. The continuing investigation, by architects of kinds of models is due less to any distrust of the imagination or to a reliance on a positivistic appeal to the direct agency of the eye, than to the desire to further the imagination, to bring it along with the model and eventually the built project, to higher and higher levels of abstraction. The process that the individual architect goes through, circulating a design through the various modes of representation in order to probe the possibilities of both the medium of the model as well as the possibilities of architecture recapitulates the process the emerging architectural profession went through over the course of three centuries, circulating its projects through a variety of kinds of models in order to arrive at, or perhaps to forever defer consensus on the most appropriate modes of architectural representation. ■



Projections

On Robin Evans' "Sections, Pictures and the Imagination"

By Jeffery Holmes

For centuries Western thought has confronted the problematic relationship among the subject, the object, and the representation of that object. Perspective drawing, the form of representation with which we are perhaps most familiar, developed in the 15th century to rationalize quantity and control both objects and space. It marked the rise of a new "subject of consciousness" in modern European philosophy equivalent to the "cogito ergo sum" of Descartes. Perspectives assigned to the spectator the place of the sovereign from which to assume the sphere of his dominion (the dimension of his knowledge, and the extent of his power). Perspective drawings were truth-conveyors, the definition in space of the relationship between the knowing "I" and the objective "not-I."

Though the perspective drawing may still be lauded as the great opener of Western eyes, other forms of representation were also being developed in the 15th and 16th centuries. In his lecture, "Sections, Pictures, and Imaginations," Robin Evans emphasized the renewed interest in orthogonal projections during this period. Unlike the perspective, orthogonal projections do not correspond to any aspect of our perception of the real world. Plans, sections, and elevations refer only to the sheet of paper itself and are therefore more abstract and anomic systems of representation. The great advantage of this type of projection is that it preserves more of the shape and size of what is drawn. It is easier to make things from than to see things with. In fact, much of the interest in orthogonal projections arose because they could be used to construct perspectives from drawings alone. As a design tool, orthogonal drawings slipped into the category of mere technical facilitator: it no longer mattered what you drew as long as it was correct.

A growing demand for precise three-dimensional graphic proofs of the functioning and buildability of architecture in the 16th century created interest in the parallel projection, a form of representation dating back to ancient China. It was the measurability of the parallel projection which brought it to the fore: a project's lethal trajectory had to be described with the same precision as the bulwarks built to deflect it. In this case, the imperfection of an image could mean the loss of an entire army. The parallel projection further enriched drawing in the realm of technique. Abolishing the subjectivity of the viewer, parallel projection represented our increasing alienation from the material world.

In the 19th century, the use of parallel projections in descriptive geometry furthered the research into more powerful, more abstract, and



more generalized techniques of architectural drawing. As a mathematical set of rules which makes it possible to describe any conjunction or intersection of geometrically consistent forms in space with a minimum of information and construction, descriptive geometry helped abolish not only subjective experience but substance itself. It marked the complete deterritorialization of architectural drawing by geometric means. By the 20th century, drawing seems to have come to a final, instrumental, and refuted end.

Evans related to our present condition as the "tyranny of the picture." There have been two distinct reactions to this: to hold on to any remaining "truth" by abolishing the object and retreating into the "autonomous" realm of drawing, or to return to direct, "authentic" experience by abolishing representation itself. Both positions are characterized by the lament of a lost unity between the subject and the object, but fail to recognize the active relations between ourselves and the world. Objective relations can only become human if we ourselves are conscious of them as such. Drawing, precisely because it arrests perception and negates further subjective experience, confronts us with limits: forces us to recognize our real objective conditions, and establishes the preconditions for transcendence. In other words, committing to paper the mapping procedure for the real thing enables the invention of other realities. Evans' lecture centered on how both Guwini and Metz van der Rohe, using highly restrictive means of representation, were nonetheless able to "look through" the drawing and create something beyond image, beyond experience, and beyond the present reality. The principal locus of conjecture in architecture becomes the drawing. Though expression of the objective world first tends toward alienation, Evans suggested that we can attain a free reality only by supporting our alienation and returning from our estrangement. ■

The third lecture in the mini-series "The Discipline of Architecture, the Section" will be George Ranalli, "Section in Autonomous Structure," Tuesday, March 31, 10-12:50, 630 p.m.

A PREVIEW

The following review is expected to solicit discussion reflecting diverse points of view, for inclusion in the subsequent issue.

"MIT Thinking the City"

Reviewed by Ikemefuna Okoye

"Get outta my way Clean Nigger Before I gets to ya This ain't no Coplay Square"

Homeless African American Man to the present writer (April 1990 the Southend, Boston)

Having first been through *Thinking the City*, it is instructive to continue walking till one gets to the other exhibition drawings and representations of the microchip, magnified some 200 times, and revealing its complex structure. I do not suggest this because one necessarily agrees with MoMA that these representations of the silicon microchip are works of art, and thus as collectible as Saint-Elia drawing of the *Futurist City* might be. Nor is it recommended simply because the microchip exhibition is curated by somebody who goes by the title of Associate Curator of the Department of Architecture and Design. It is also obvious, I hope, that the suggestion has nothing to do with the resemblance between the microchip architecture and the imaginable urban plan for a future city: future city multiple-exposed so as to reveal the ethnoaesthetics and the traces of illuminated motion at dusk, bringing back memories of early 1980's avant-garde experimental video or the film *Koyaanisqatsi*.

Rather, I make the suggestion on that you cross the bridge, or whatever the object is between Fernando Domoyko's *Connecting Differences, Bridges in the City* and the exhibition of microchip drawings, because that particular experience clarifies the differences between the separate ways in which the projects approach the question of how to understand the dynamic between the form and the content, or meaning of the city.

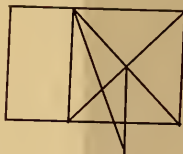
Of course, form and content would be an inaccurate characterization of what the city is about, as seems to be recognized by the careful choice of the term *Thinking*, as opposed to pace Kevin Lynch, *Imaging the City*. Nevertheless, common to many of the *Thinking the City* pieces, projects, analyses, is an assumption, that architecture as a practice has primacy in the directing of the forms in which the city is aligned, or in which it is constituted and reconstituted in time. It is understandable that the architects of early modernism bought into such an illusion, failing to understand the instrumentality of the situation which catapulted their practice once again, and briefly, to a supremacy. We may therefore sympathize with their failure to anticipate the crisis which was bound to follow, and which Manfred Tafari's polemical work *Architecture and Utopia* has captured so essentially, in part by recognizing that the crisis lies also within architectural representation (or imageability) itself.

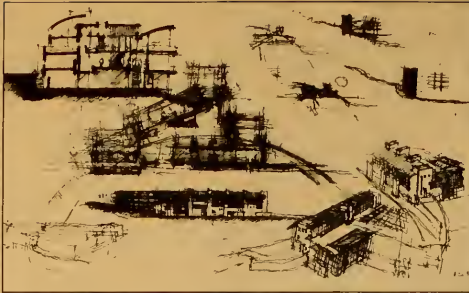
Today however, one ought not take the question of power for granted, as if, oblivious to recent historical research we claim an efficacy for representation which is not proper to it. (Frieden's and Sagalyn's *Downtown Inc., How America Rebuilds Cities* [1991] is perhaps a recent non-pessimistic example which unlike previous work does not see evil intention in anything driven by profit).

For what seems to pervade some of the presentations in the exhibition is a nostalgic conception of the city primarily as a formal and physical object whose most essential reality is recognized in surfaces, boundaries and connectivities. Thus conceived, the city is apparently easily understood and even controlled by those who represent it as it is, or as it may be.

Completely absent, if one excepts Shayne O'Neil's cryptic but appropriately pessimistic work, is the notion that the city exists also at other non-physical levels and the irony that as such, its traces are fleeting and not representable by such

(Continued on page 6)



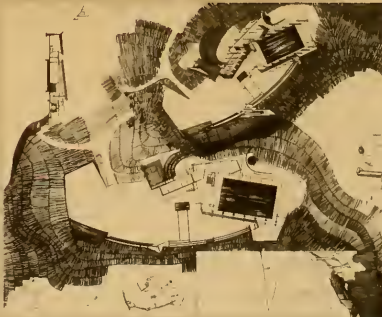
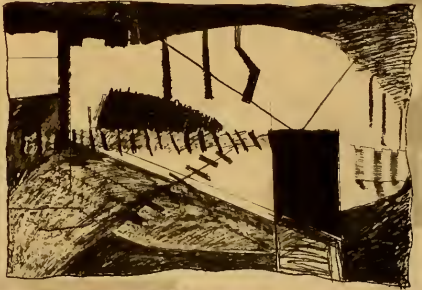


How does a building exhibit clarity in its entirety while simultaneously providing complexity and richness of experience? This drawing, done on one sheet in a few hours, shows a method I used to synthesize the issues present in this dilemma. By looking simultaneously at issues of site, program, structure, etc., from many different perspectives, drawings become solutions that begin to address the concepts as well as the detail. The clarity that comes out of this method of drawing is achieved through the synthesis of multiple ordering systems, and complexity is a byproduct of this synthesis.

Julia Nugent
M Arch. Thesis "Clarity and Complexity: Designing for an Educational Community"

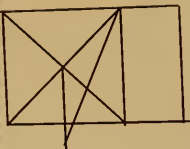
This drawing is titled "The Big View." It is one in a series of eight drawings that I used to explore the qualities of my thesis site. These drawings are concerned with site issues and architectural issues. They attempt to get at them in a way that is outside of the conventions of architectural drawing. I see them as unsensored blotters that can contain layers of doodles, notes, images, and colors.

Cyrine Linton
M Arch. Thesis "Claiming the Urban Industrial Landscape"



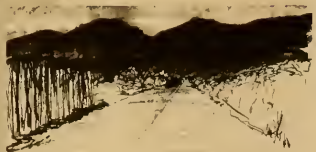
"It is important to realize that it is not what we draw; rather it is what we see. However, through drawing what we see we return to the world of the physical. Drawing what we see becomes not only part of our visual memory but also part of our motor memory. Along with drawing comes an understanding that it is not only cognitive but physical."

Daniel Johnson
M Arch. Thesis, "Building, Landscape, and Section"



This sketch was drawn very early in the process of my thesis. In sketching it I was attempting to place myself in the landscape that was very distant from me physically but strong in my memory visually and experientially. It is entitled, "Headed Home Just After Sunset, Rt 128, Yolo County."

Albert Vallecillo
M Arch Thesis, "The Dream is a Lie, But the Dreaming is True"



CALENDAR

NOTES

Reminder to Faculty

Please return revised biographies to Headquarters or a member of the Orientation Committee as soon as possible.

Students

If you are interested in giving tours to incoming 1993 students please see/call Jean Sucharewicz in Headquarters (258-8436). Remuneration available.

Intern Development Program (IDP) Resource Packages for 1991-1992 are available in the Career Services Office, Rm.12-170.

Thank You ...

Over IAP three students - Alex Van Praagh, Andrew Russin, and Jean Pierre Parnas contributed their time and energy to make new tables and additional seating in the Cafe in Bldg. N52. Thanks from all of us who enjoy the added support and surface area.

ROTCH Moves On-Site for Spring '92

ROTCH has come to your studio space. On February 10 Rotch Library and Rotch Visual Collections opened an office in N51, Rm. 349, x3-1422, with office hours Monday—Thursday, 11:00 to 1:00.

Our term-long visit will provide us with a picture of your instructional and research needs. We want to find out what literature, slides, videotapes and other resources you may need for presentation and research. Look forward to:

- consultations
- demonstrations
- computerized literature searches
- thesis prep
- a book drop in N52

We're calling this collaboration between the Dept. of Architecture and MIT Libraries **ROTCH AT THE EDGE**. Here is the team:

Katherine Poole, *RVC Librarian*
 Michael Leininger, *Architecture Librarian*
 Mary Clare Altenholen, *Art and Art History Librarian*
 Omar Khalidi, *Agia Khan Librarian*
 Renee Chow, *Asst. Prof., Faculty Liaison*
 Jane E. Lee, *M.Arch. Program R A*

■ **31 March**
 Lecture - MIT Department of Architecture Lecture Series, Rm.10-250, 6:30 p.m.
 George Ranalli, Architect, New York, "Section in Autonomous Structure"

■ **1 April**
 HTC Forum, Rm.6-233, 11:00 a.m.
 George Ranalli

■ **2 April**
 HTC Forum - Rm.3-309, 5:30 p.m.
 Stanislaus von Moos, University of Zurich, "Giedion and Mumford"

■ **3 April**
 Lecture - Environmental Design Forum, Rm.10-485, 12:00 Noon
 Bill Hillier, author of "Social Logic of Space"

■ **7 April**
 General Meeting

■ **8 April**
 Lecture - GSD, 6:00 p.m.
 Itsuko Hasegawa

■ **9 April**
 Intern Review - N52-419, 2:00 p.m.
 Dawood College Outreach Studio

■ **9 April**
 HTC Forum, Rm.3-309, 5:30 p.m.
 Eva Blau, Bunting Institute, Radcliffe College, "Revolution or Architecture: The Building Program of Red Vienna"

■ **14 April**
 Lecture - MIT Department of Architecture Lecture Series, Rm. 9-150, 6:30 p.m.
 Andrea Leers, Architect, Boston "Material, Form, and the Aesthetics of Construction"

■ **15 April**
 Lecture - GSD, 6:00 p.m.
 Michael Brill

■ **22 April**
 Lecture - GSD, 6:00 p.m.
 Frank Gehry

■ **23 April**
 HTC Forum, Rm.3-309, 5:30 p.m.
 Micha Bandini, Head, Dept of Architecture, North London Polytechnic, "On David Harvey's Postmodernism"

■ **28 April**
 Lecture - Arthur Schein Lecture MIT Department of Architecture Lecture Series, Rm.10-250, 6:30 p.m.
 Joseph Paul Kleihues, Architect, Berlin, "Berlin: City of Enlightenment"

customary means as the architectural drawing and model (The idea of the Unbuildable Remainder parcel), and, the resistance to a commodity definition of space is, incidentally, much more interesting than the resolution as developed by Shapine in the realms of perception) Though we may find tiring the seemingly endless plethora of Japanese competitions troubled by the difficulty of representing this new city, we may at least concede that their notion of the Information City is and will continue to be (shudder if you must... especially if you find Reiter's drawings seductive) more real for most American city dwellers than those we attempt to represent! Not coming to this realization relegates the projects and ideas represented in the exhibition to a place in which they appear anachronistic.

Even if, for example, both John and Margaret Myers' *Thoughts On Urban Community* and Jan Wampler's *Space Between* recognize the cultural network of which architecture is only a part, they nevertheless analogize the relationship across the various components of culture. For the Myers, attached buildings mean attached places, mean attached communities. For Wampler, 'positive' spaces in between buildings will provide mirrors of a culture whose reflection, being ultimately of ourselves, we will like to see. But, architecture as an ideological form does not operate so transparently. Hand-in-hand brownstones may hide violent histories of displacement as illustrated by the gentrification of the inner city which not so long ago had been transformed into the preserve of the poor. In Boston for example, Copley Place and the South End, and the intervening 'positive' space between them, have undergone just this transformation. If this fact may be lost on some of its current residents, it certainly is not on its now refugee former residents, in whose context, having assumed I was a new middle class resident, the encounter quoted at the start derives

And lest the point of the critique made here still remains vague, it may be worth asking ourselves the question whatever happened to Beacon Hill's African Americans? Why is their memory now only preserved in the African Meeting House? Why do many Black people, en route to this meeting house today experience the querying stare which seems to ask 'What are you doing here?'

The irony of visual queries such as the one above, occurring where newer residents are estranged from, and fail to recognize, the older ex-residents who may have been expelled from nice brownstones on the former's behalf, did not seem to be addressable in the projects presented to us (not even by Reiter's formalization of the problem). This fact gives us entry into the relevance of the microprocessor exhibition mentioned at the outset. That exhibition was organized as a series of rooms, complete with silicon-chip like Iranian carpets, couches, and the strains of what sounded like Mahler waiting

into the space. One could almost have been in the living room of a well-heeled member of the upper-middle class. Only the Port decanter was missing.

Accompanied by this most civilized of music, one is struck by the function to which the beautiful drawings are actually put. This one for a more accurate targeting of a US Navy guided-missile radar system, that one for an intolerably precise homing device for this or that millimeter shell gun for a US Marine tank. The irony of heavenly music accompanying so beautiful a representation of barbarity, is (one hopes) a purposeful one. That is, one is persuaded to believe that this curator of Architecture and Design, recognizes the more fatal aspects to the illusion which representation acquires in the practical arts (as opposed to the visual arts), a paradox she seems to want to communicate. A sense of paradox, moreover, which needs recovery in architecture if practice is ever again to be authorized to make proposals.

This sense is missing from the religiosity of many of the *Thinking the City* exhibits, where the inherent slippage between what is being represented and the representation itself, whether visual, literary or social, does not seem to be acknowledged. The symptoms already exist in Reiter's metaphor of the wall as separator within the urban fabric, even one that separates the wealthy from the disadvantaged, where he believes that the confessional really is about listening. This misses the fact that the confession is a ritual, in which the words are spoken at a disembodied listener, and, therefore, it is a representation of listening rather than an interactive conversation where listening takes its proper form.

However, other exhibits, especially Maunce Smith's seem concerned neither with representation nor with the city as such. Thus, if we imagine what the implications of critical, uncompromising and unromanticized engagement with program and material are for the city, we could be saved—perhaps inadvertently but nevertheless, thankfully—from too much confidence in the given image and from the persistence of the ominous ■

